REMARKS

Claims 19 to 29 are added, and therefore claims 14 to 15 and 19 to 29 are currently pending and being considered, as claims 1 to 9 have been previously cancelled and claims 10 to 13 and 16 to 18 are withdrawn.

Reconsideration of the application is respectfully requested based on the following remarks.

Applicants respectfully note that various papers from the Office, including the Filing Receipt, incorrectly state the title of the present application as being "Sensor, controller and method for monitoring at least one sensor." However, the Application as originally filed correctly indicated the title of the present application to be "SENSOR, CONTROL UNIT, AND METHOD FOR MONITORING AT LEAST ONE SENSOR." Therefore, the Applicants respectfully request that the Office correct their records with regards to the title of the present application. Applicants are concurrently filing a formal Notice to Correct the Filing Receipt.

With respect to paragraph 4 of the Office Action, claims 14 to 15 were rejected under 35 U.S.C. § 102(b) as anticipated by Eid et al., U.S. Patent No. 6,115,654 (the "Eid" reference).

As regards the anticipation rejections of the claims, to reject a claim under 35 U.S.C. § 102(b), the Office must demonstrate that each and every claim feature is identically described or contained in a single prior art reference. (See *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991)). As explained herein, it is respectfully submitted that the Office Action does not meet this standard, for example, as to all of the features of the claims. Still further, not only must each of the claim features be identically described, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed invention, namely the claimed subject matter of the claims, as discussed herein. (See *Akzo, N.V. v. U.S.I.T.C.*, 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986)).

As further regards the anticipation rejections, to the extent that the Office Action may be relying on the inherency doctrine, it is respectfully submitted that to rely on inherency, the Examiner must provide a "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics *necessarily* flows from the teachings of the applied art." (See M.P.E.P. § 2112; emphasis in original; and see *Ex parte Levy*, 17

U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Int'f. 1990)). Thus, the M.P.E.P. and the case law make clear that simply because a certain result or characteristic may occur in the prior art does not establish the inherency of that result or characteristic. Accordingly, it is respectfully submitted that any anticipation rejection premised on the inherency doctrine is not sustainable absent the foregoing conditions.

Independent claim 14 is directed to a control unit. Claim 14, as presented, includes the features of "*a sensor comprising a sensor element, at least one digital interface, and means for transmitting a fault pattern via the at least one digital interface, wherein the fault pattern is a digital fault pattern comprising individual bits corresponding to different fault flags*." Claim 14, as presented, also includes the features of "*a processor that receives at least one signal from the sensor via the at least one digital interface, wherein the at least one sensor signal includes the fault pattern and the processor evaluates the at least one sensor signal as a function of the fault pattern*."

The "Eid" reference does not identically disclose (or even suggest) at least the above-identified claim features.

Firstly, the "Eid" reference does not identically disclose (or even suggest) the feature of a sensor comprising a means for transmitting a digital fault pattern comprising individual bits corresponding to different fault flags. Instead, the "Eid" reference only refers to a sensor connected to a DSP through an ADC (analog to digital converter, as in Figure 2) or "Sensor Operation" (as in Figure 4), and states: "*As such, the output of the analog to digital converter 46 is coupled with an input on the DSP 24 so that the response signal carrying a parametric measurement from the sensors 22 can be communicated to the DSP 24*" (col. 6, lines 60-64, emphasis added). However, a parametric measurement does not identically disclose (or even suggest) a digital fault pattern comprising individual bits corresponding to different fault flags. Indeed, the "Eid" reference provides little if any information concerning the parametric measurement, only hinting that it is a sensor signature, as follows: "*The digital response signal communicates a parametric measurement from each sensor 72 that is equivalent to a sensor 72 signature*" (col. 9, lines 5-8, emphasis added). However, a sensor signature is also not a digital fault pattern comprising individual bits corresponding to different fault flags.

Secondly, the "Eid" reference also does not identically disclose (or even suggest) a control unit which includes a processor which receives a signal from the sensor, the signal

having the fault pattern, and the processor evaluating the signal based on the fault pattern. The Office Action likens the control unit processor of claim 14 to the DSP 70 in Figure 4 of the "Eid" reference. However, the DSP 70 in Figure 4 of the "Eid" reference does not receive a signal from the sensor comprising a digital fault pattern. Instead, as explained above, the DSP 70 may only receive a measurement, and as also explained above, a parametric measurement does not identically disclose (or even suggest) a digital fault pattern having individual bits corresponding to different fault flags.

Furthermore, the DSP 70 of Figure 4 of the "Eid" reference also does not evaluate the signal received from the sensor based on the fault pattern contained in the signal. Instead, the "Eid" reference states:

> "*In addition, the universal sensor interface system 62, 64 is able to acquire sensor 72 response signals and convert the response signals into a parametric measurement that is transmitted in a common digital format to the host computer system 66.*" (col. 8, lines 38-42)

> "*The digital response signal communicates a parametric measurement from each sensor 72 that is equivalent to a sensor 72 signature. The sensor 72 signature signal is then communicated to the host computer system 66 for processing.*" (col. 9, lines 5-9, emphasis added)

Thus, the DSP merely passes the measurement along to a host computer system 66. The "Eid" reference does not disclose that the DSP evaluates the signal received from the sensor based on the fault pattern contained in the signal.

The "Eid" reference further states:

> "*During normal operation, the universal sensor interface system 60 is preferably also capable of performing a variety of functions in addition to automatic sensor 72 recognition. The universal sensor interface 62, 64 can be programmed to notify a user of a faulty response signal, a wiring problem, a malfunctioning sensor, and pin connector assignments that must be reconfigured for a particular sensor 72. The universal sensor interface system 70 can also be programmed with sensor 72 fault detection and isolation abilities. For example, a few of the faults that commonly occur in aircraft sensor 72 systems are an open circuit, a short circuit, an ultrasonic sensor delamination, or an accelerometer becoming inoperative. In any of these events, the universal sensor interface system 60 is preferably able to detect these problems and generate a user output signal that will guide a technician to the exact source of trouble.*" (col. 9, lines 35-50, emphasis added)

Thus, the "Eid" reference merely states that the universal sensor interface system generally is able to "*detect these problems and generate a user output signal that will guide a technician*

to the exact source of trouble," but it does not disclose that the DSP performs this function. Rather, based for example on the above-discussed "Eid" reference's communication of the measurement from the DSP to the host computer system for processing, it appears that the host computer system 66 "*detects these problems and generates a user output signal.*" Thus, the "Eid" reference does not disclose a control unit processor which evaluates a sensor signal having a fault patter based on the fault pattern.

Therefore, the above-discussed features of independent claim 14 are not identically disclosed (or even suggested) by the "Eid" reference. Accordingly, claim 14, as well as its dependent claim 15 is allowable.

It is therefore respectfully requested that the anticipation rejections of claims 14 to 15 be withdrawn.

New claims 19 to 29 do not add any new matter and are supported by the present application, including the specification. New claims 19 to 29 depend from independent claim 14, as presented, and are therefore allowable at least for the reasons explained above as to claim 20.

Accordingly, claims 14 to 15 and 19 to 29 are allowable.

CONCLUSION

Applicants respectfully submit that all pending claims of the present application are allowable. It is therefore respectfully requested that the objections and rejections be withdrawn. Prompt reconsideration and allowance of the present application are therefore respectfully requested.

Respectfully submitted,

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